

P-0598 June 6, 2012 (Revised June 15, 2012)

Kimberly Tisa
PCB Coordinator
Office of Ecosystem Protection
EPA-New England, Region I
5 Post Office Square, Suite 100
Mail Code: OSRR07-2
Boston, MA 02114-2020

Re: Self-Implementing PCB Cleanup Plan
Ribicoff Building, Former Norwich State Hospital
Parcel A, 50 Route 12, Preston, CT

Dear Ms Tisa:

The following Self-Implementing Cleanup Plan is being submitted on behalf of the Town of Preston, CT for the Ribicoff Building of the Former Norwich State Hospital project located at Parcel A, 50 Route 12, in Preston, CT in accordance with 40 CFR 761.61(a). The cleanup is part of the abatement and demolition of the Ribicoff Building and redevelopment of the Former Norwich State Hospital site. This project is being overseen by the Preston Redevelopment Authority and funded by an EPA Brownfields Cleanup Grant. Currently the site is vacant except for the presence of the demolition and abatement contractor, Manafort Brothers, who has been selected by the Town to conduct abatement and demolition at the site and has construction trailers and a full time presence at the site.

A site location map is provided as Figure 1 (Appendix A). An aerial photograph showing the Ribicoff Building is provided as Figure 2.

# **General Approach**

The general approach of this Self-Implementing Cleanup will consist of the following:

- Removal of PCB Bulk Product Waste >50 ppm from the building for disposal at a TSCA/RCRA Hazardous Waste Facility
- Removal of PCB Remediation Waste <50 ppm from the building for disposal at a non-TSCA Facility
- Excavation and disposal of soil as a PCB Remediation Waste <50 ppm at a non-TSCA disposal facility
- Decontamination of building material (e.g. steel lintels) using Capsur solution
- Collection of verification samples to demonstrate that cleanup levels have been meet
- Control of dust during demolition to minimize the spread of PCBs
- Decontamination of equipment using the double wash/rinse method (Subpart S)

Additional activities will be conducted as part of the project which are not covered by this SIP but are provided within this document for information purposes including the following:

• Abatement and disposal of hazardous building materials (e.g. asbestos, lead paint, universal wastes, mercury containing equipment) at licensed facilities

 Demolition of building and disposal of wastes at licensed facilities and re-use of clean building materials in accordance with CT Department of Energy and Environmental Protection (CTDEEP) regulations

# **Building Characteristics**

The Abraham Ribicoff Research Center Building is a four-story steel and masonry building with a basement. The exterior facades consist of brick veneer over concrete block. The interior walls are a combination of concrete block and limited gypsum board partition walls. The floors are poured concrete and steel bar joists support each floor deck. The windows are aluminum and the doors are a combination of solid core wood and metal. The building's heating system consists of a combination of radiant steam heat and ceiling mounted forced hot air.

The Ribicoff Building was constructed in 1966 and no renovations have occurred since that time. Based on the construction date, the building may potentially contain caulks and window glazing compounds that contain PCBs and was therefore evaluated for such materials prior to demolition.

The inventory of caulk and window glazing compound potentially containing PCBs and identified within the interior or on the exterior of the building include the following:

- Interior metal window glazing compound
- Interior stairwell door/window caulk
- Exterior window frame caulk
- Exterior stairwell window frame caulk
- Exterior Window Sill Caulk
- Parapet Caulk

An inventory and description of caulking materials surveyed in the building is provided in Table 1 (Appendix B). Representative photographs of the building and PCB-containing building materials is provided in Appendix C. Locations of PCB-containing building materials and sampling locations are shown on Figures PCB-SO-1, PCB-SO-2, PCB-SU-1, and PCB-SU-2

#### **Site Characterization**

# PCB-Containing Building Materials Investigation

Nobis Engineering, Inc. (Nobis) conducted a Hazardous Building Materials Investigation in 2010 and the results are provided in a report entitled *Hazardous Material Survey Report*, dated October 28, 2010. The investigation was performed as part of an EPA-funded Targeted Brownfields Assessment for the site. Details on sample collection and analytical results are provided within the report in Appendix D. Four source samples consisting of caulking were collected. PCBs (Arochlor 1254) were detected in the samples as follows:

- front door caulk 2.61 ppm
- window caulk 179 ppm
- concrete sill caulk 147,000 ppm
- side door caulk 1.23 ppm

The Preston Redevelopment Agency (PRA) subsequently received three EPA Brownfield Cleanup Grants for the site for the demolition and abatement of buildings. As part of the Cleanup Grant, Tighe & Bond prepared a Quality Assurance Project Plan (QAPP) for investigation of PCBs in building materials and soil. EPA subsequently approved the QAPP and a copy is provided in Appendix E.





Eagle Environmental, Inc. (Eagle) conducted a Supplemental HBMI in 2010 and the results are provided in a report entitled *Supplemental Hazardous Building Materials Investigation Services*, dated December 7, 2010. Details on sample collection and analytical results are within their report provided in Appendix F. Two source samples were collected during the inspection from interior and exterior window caulk. PCBs (Arochlors 1254 & 1260) were detected in the samples as follows:

- interior window frame caulk 6.5 ppm
- exterior window frame caulk 1.6 ppm

Eagle conducted a PCB-Containing Building Materials Investigation in 2011 and the results are provided in a report entitled *Polychlorinated Biphenyl (PCB) Containing Materials Sampling & Analysis Report*, dated September 14, 2011. Details on sample collection and analytical results are within their report provided in Appendix G. Nine additional source samples and 23 substrate samples were collected during the inspection. PCBs (Arochlor 1254) were detected in the samples as follows:

- interior metal window glazing compound 0.91 to 1.3 ppm
- interior stairwell door/window caulk 4.6 ppm
- exterior window frame caulk 202 ppm
- exterior stairwell window frame caulk 0.77 ppm
- window sill caulk 3,500 ppm

The substrate sampling did not identify significant leaching of PCBs. All second course samples were found to be none detected for PCBs except for one sample at 0.64 ppm (2<sup>nd</sup> course brick right side last window). The substrate sampling took into account potential remediation approaches and the sampling was performed to support those approaches.

Eagle conducted a Supplement PCB-Containing Building Materials Investigation in 2011 and the results are provided in a report entitled *Supplemental Polychlorinated Biphenyl (PCB) Containing Materials Sampling & Analysis Report*, dated October 26, 2011. Details on sample collection and analytical results are within their provided report in Appendix H. No additional source samples were collected during this inspection. Fifteen supplemental substrate samples were collected during the inspection. The substrate sampling was performed on first course materials. The first course substrate materials are those substrates that are in contact with the PCB-containing source material. PCBs (Arochlor 1254) were detected in the samples as follows:

- first course brick/mortar exterior 0.32 to 17 ppm
- first course block interior 0.24 to 0.29 ppm

Eagle collected three samples of parapet caulking on May 17, 2012. All three samples had PCBs concentrations less than 50 ppm. Laboratory data for this sampling are included in Appendix I.

#### Soil Investigation

Tighe & Bond conducted a soil investigation in October and November 2011 to determine if PCB-containing building materials had impacted surface soils. Twenty nine sampling locations were selected at representative locations around the building at 0-3 inch and 1 foot depths. Thirty eight soil samples plus QA/QC samples were collected for analysis of PCBs by EPA Method 8082 with soxhlet extraction and following CTDEEP's Reasonable Confidence Protocols (RCPs).





PCBs (Arochlor 1254) were detected in 20 samples at concentrations ranging from 0.12 to 7.4 ppm. Three sampling locations were above the cleanup level of 1 ppm. A summary of analytical data is provided in Table 2. Sampling locations are shown on Figure 3. Laboratory reports are provided in Appendix J.

# PCB-Containing Equipment

A transformer vault is located on the north central side of the building to the left of the entryway as shown on Figure 3. The vault currently contains one inactive transformer but historically contained three transformers. Reportedly, the State of Connecticut removed two of the transformers in the early 1990s. CTDEEP is currently trying to locate the information on the transformer removals.

The transformer vault was inspected on December 7, 2011 by Tighe & Bond. At the time of the inspection the vault was flooded with approximately six inches of water and was being pumped out by Manafort Brothers. The water had to be pumped from vault to inspect for the presence of the transformer(s). The water in the vault did not contain an oily sheen and no leakage from the transformer was observed after pumping. Upon observation of the transformer, the pumping to the ground surface was discontinued. The transformer was labeled as "Non-PCB" and no signs of leakage from the transformer were observed. During the inspection, the oil in the existing transformer was sampled for PCBs as well as the sediment on the floor beneath the transformer. An electrical pod on the wall was leaking and the oil accumulated on the floor was also sampled for PCBs. Results of the PCB analyses are provided in Appendix K and a summary is as follows:

- Transformer (sample RF-Oil-1) 1.9 ppm (Arochlor 1260)
- Sediment (sample RF-Sed-1) 0.32 ppm (Arochlor 1260)
- Electrical Pod (sample RF-Oil-2) ND < 0.91 ppm

# Source and Substrate Removal Approach, Rationale, and Procedures

#### Approach

The following provides the general approach for removal of source and substrate building materials from the Ribicoff Building.

Windows (Non-Stairwell)

- 1. The removable operable window sashes will be removed from the window frame and disposed of as PCB Remediation Waste. The glazing compound contains <50 ppm PCBs (and asbestos).
- 2. The metal window frame impacted by caulk containing >50 ppm of PCBs will be removed and disposed of as PCB Bulk Product Waste (and asbestos waste).
- 3. The masonry sills impacted by caulk from the bottom of the window frame will be removed and disposed of as PCB Remediation Waste (and potentially asbestos waste). The course of brick under the stone sill is not contaminated with PCBs. To confirm that the cleanup level of 1 ppm has been achieved, verification samples will be collected as indicated on Table 1 and Photo 16.
- 4. The steel lintels on the top of the window openings will be decontaminated by wiping with a Capsur solution where the bead of caulk contacts the lintel. A decontamination pilot test was performed on four steel lintels on May 17<sup>th</sup>. The lintels are welded to the building and covered in primer. An attempt was made to collect a sample of primer; however, the primer is very thin and weathered and it was not possible to collect a 15 gram sample required by the laboratory for analysis. The lintels were wiped with Capsur until the lintels were visibly clean. Then wipe samples were collected and analyzed for PCBs. Results of the wipe



sample were Not Detected (ND) for PCBs on all four lintels demonstrating that the decontamination technique is effective. Laboratory data for the wipe samples is provided in Appendix I. A MSDS sheet for Capsur is provided in the in Appendix L. During demolition, this procedure will be used to decontaminate the lintels and wipe samples will be collected on 10% of the decontaminated lintels. The lintels will be recycled as scrap metal. The course of brick over the metal lintel is not contaminated with PCBs. To confirm that the cleanup level of 1 ppm has been achieved, verification samples will be collected as indicated on Table 1 and Photo 16.

5. The first course of brick (8 inches from the caulk line, first full brick) impacted by caulk containing >50 ppm of PCBs will be removed and disposed of as PCB Remediation Waste (and asbestos waste).

## Stairwell Windows and Interior Door/Window Frames

- 1. The metal window frames impacted by caulk containing <50 ppm of PCBs will be removed and disposed of as PCB Bulk Product Waste (and asbestos).
- Caulk containing <50 ppm of PCBs will be removed from the first course of exterior bricks by manual methods and disposed of as a PCB Bulk Product Waste. Initial sampling indicated that significant leaching has not occurred on the exterior brick associated with the stairwells and the brick can be adequately cleaned and disposed of as non-hazardous solid waste. To confirm that the cleanup level of 1 ppm has been achieved, verification samples will be collected as indicated on Table 1 and Photo 18.</p>
- 3. Caulk containing <50 ppm of PCBs will be removed from the cinder blocks at the interior door frame by manual methods and disposed of as a PCB Bulk Product Waste. Initial sampling indicated that significant leaching has not occurred on the interior cinder block associated with the stairwell doors and the block can be adequately cleaned and disposed of as non-hazardous solid waste. To confirm that the cleanup level of 1 ppm has been achieved, verification samples will be collected as indicated on Table 1.
- 4. The interior door frame impacted by caulk containing <50 ppm of PCBs will be removed and disposed of as PCB Bulk Product Waste or will be decontaminated by the Capsur method and recycled. Wipe samples will be collected at a frequency of one sample per door frame to confirm that the decontamination procedures reduced levels to less than  $10 \, \mu g/100 \, \text{cm}^2$ .

# **Exterior Entry Doors**

- 1. The metal door frames impacted by caulk containing <50 ppm of PCBs will be removed and disposed of as PCB Bulk Product Waste (and asbestos waste) or will be decontaminated by the Capsur Method and recycled. Wipe samples will be collected at a frequency of one sample per door frame to confirm that the decontamination procedures reduced levels to less than 10 µg/100 cm<sup>2</sup>.
- 2. Caulk will be removed from the first course of exterior bricks by manual methods and and disposed of as a PCB Bulk Product Waste. Initial sampling indicated that significant leaching has not occurred on the exterior brick associated with the entry doors. To confirm that the cleanup level of 1 ppm has been achieved, verification samples will be collected as indicated on Table 1.
- 3. Caulk containing <50 ppm of PCBs will be removed from the granite at the front door by manual methods, disposed of as a PCB Bulk Product Waste and visually inspected. If acceptable, the granite will then be disposed of as non-hazardous solid waste. Sampling confirmed that significant leaching has not occurred on the exterior granite associated with the front entry doors and the granite can be





adequately cleaned and disposed of as non-hazardous solid waste. Wipe samples will be collected at a frequency of one sample per door to confirm that the decontamination procedures reduced levels to less than  $10 \, \mu g/100 \, \text{cm}^2$ .

## Parapet

- 1. The parapet caulk will be removed and disposed of as a PCB Bulk Product Waste.
- The first full course of bricks will be removed and disposed of as a PCB Remediation Waste.

## Rationale and Supporting Data

The following provides the rationale and supporting data for the approaches listed above for removal of source and substrate building materials from the Ribicoff Building.

## Windows (Non-Stairwell)

- 1. The removable operable window sashes will be removed from the window frame and disposed of as PCB Remediation Waste. The glazing compound contains <50 ppm PCBs (and asbestos).
  - Sample 8-24-PCB03 Interior Metal Window Glazing 1.3 ppm
  - Sample 8-24-PCB04 Interior Metal Window Glazing ND
  - Sample 8-24-PCB05 Interior Metal Window Glazing 0.91 ppm
- 2. The metal window frame impacted by caulk containing >50 ppm will be removed and disposed of as PCB Bulk Product Waste (and asbestos waste).
  - Sample 8-24-PCB26 Exterior Window Frame Caulk 92-110 ppm
  - Nobis Sample 179 ppm
- 3. The masonry sills impacted by caulk from the bottom of the window frame will be removed and disposed of as PCB Remediation Waste (and potentially asbestos waste). The course of brick under the stone sill is not contaminated with PCBs but verification samples will be collected as indicated in Table 1 and Photo 16.
  - Sample 8-24-PCB01 Exterior Window Sill Caulk 1,100 and 2,400 ppm
  - Nobis Sample 147,000 ppm
  - Sample 8-24-PCB06 Course of Brick Under Stone Sill ND
  - Sample 8-24-PCB07 Course of Brick Under Stone Sill ND
  - Sample 8-24-PCB08 Course of Brick Under Stone Sill ND
- 4. The steel lintels on the top of the window openings will be decontaminated where the bead of caulk contacts the lintel using a Capsur solution. The lintels will be recycled as scrap metal. Wipe samples will be collected at a frequency 10% to confirm that the decontamination procedures reduced levels to less than 10 μg/100 cm². The course of brick over the metal lintel is not contaminated with PCBs but verification samples of brick substrate will be collected as indicated in Table 1 and Photo 16.
  - Sample 8-24-PCB09 Course of Brick Over Metal Lintel ND
  - Sample 8-24-PCB10 Course of Brick Over Metal Lintel ND
  - Sample 8-24-PCB11 Course of Brick Over Metal Lintel ND
- 5. The first course of brick (8 inches from the caulk line, first full brick) impacted by caulk containing >50 ppm will be removed and disposed of as PCB Remediation Waste (and asbestos waste).

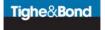




- Sample 10-7-PCB-01 First Course Brick/Mortar 17 ppm
- Sample 10-7-PCB-02 First Course Brick/Mortar 0.320 ppm
- Sample 10-7-PCB-03 First Course Brick/Mortar 8.7 ppm
- 6. The second course of brick is not contaminated with PCBs above 1 ppm but verification samples will be collected as indicated in Table 1 and Photo 16.
  - Sample 8-24-PCB12 2<sup>nd</sup> Course of Brick Side of Window Frame 0.64 ppm
  - Sample 8-24-PCB13 2<sup>nd</sup> Course of Brick Side of Window Frame ND
     Sample 8-24-PCB14 2<sup>nd</sup> Course of Brick Side of Window Frame ND
- 7. The interior cinder block is not in contact with the exterior caulk containing >50 ppm and is below the cleanup level of 1 ppm.
  - Sample 10-7-PCB-13 Interior Cinder Block at First Course 0.290
  - Sample 10-7-PCB-14 Interior Cinder Block at First Course 0.240
  - Sample 10-7-PCB-15 Interior Cinder Block at First Course 0.280
  - Sample 8-24-PCB33 Interior Cinder Block at First Cut Line (4") ND
  - Sample 8-24-PCB34 Interior Cinder Block at First Cut Line (4") ND
  - Sample 8-24-PCB35 Interior Cinder Block at First Cut Line (4") ND

## Stairwell Windows and Interior Door/Window Frame

- The metal window frames impacted by caulk containing <50 ppm will be removed 1. and disposed of as a PCB Bulk Product Waste (and asbestos) or decontaminated with Capsur solution.
  - Sample 8-24-PCB23 Interior Stairwell Door/Window Caulk ND
  - Sample 8-24-PCB24 Interior Stairwell Door/Window Caulk 1.1 3.5 ppm
  - Sample 8-24-PCB27 Exterior Stairwell Door/Window Caulk ND
  - Sample 8-24-PCB28 Exterior Stairwell Door/Window Caulk 0.77 ppm
- 2. The first course of exterior brick will be cleaned by manual methods and verification samples will be collected as indicated in Table 1
  - Sample 10-7-PCB-05 1st Course of Brick Stair Window ND
  - Sample 10-7-PCB-06 1st Course of Brick Stair Window ND
  - Sample 8-24-PCB18 2<sup>nd</sup> Course of Brick Stair Window ND
  - Sample 8-24-PCB19 2<sup>nd</sup> Course of Brick Stair Window ND
- 3. The interior cinder block impacted by the caulk containing <50 ppm will be cleaned by manual methods and verification samples will be collected as indicated in Table 1.
  - Sample 10-7-PCB-08 1st Course of Cinder Block Stair Window ND
  - Sample 10-7-PCB-09 1st Course of Cinder Block Stair Window ND
  - Sample 8-24-PCB21 2<sup>nd</sup> Course of Block at Window ND
  - Sample 8-24-PCB22 2<sup>nd</sup> Course of Block at Window ND
- 4. At the interior door frame, the interior cinder block impacted by the caulk containing <50 ppm will be cleaned by manual methods and verification samples will be collected as indicated in Table 1.
  - Sample 10-7-PCB-07 1st Course of Cinder Block Stair Door ND
  - Sample 8-24-PCB20 2<sup>nd</sup> Course of Block at Door ND





5. The interior door frame impacted by caulk containing <50 ppm will be removed and disposed of as PCB Bulk Product Waste or decontaminated with Capsur solution. Wipe samples will be collected at a frequency of one sample per door frame to confirm that the decontamination procedures reduced levels to less than  $10~\mu g/100~cm^2$ .

## Exterior Entry Doors

- 1. The metal door frames impacted by caulk containing <50 ppm will be removed and disposed of as PCB Bulk Product Waste (and asbestos waste) or decontaminated with the Capsur solution. Wipe samples will be collected at a frequency of one sample per door frame to confirm that the decontamination procedures reduced levels to less than  $10 \, \mu g/100 \, \text{cm}^2$ .
  - Nobis Sample 2.61 ppm at Front Door
  - Nobis Sample 1.23 ppm at Side Door
- 2. The first course of exterior brick (8 inches from the caulk line, first full brick) impacted by caulk containing <50 ppm will be cleaned by manual methods and verification samples will be collected as indicated in Table 1.
  - Sample 10-7-PCB-04 1st Course of Exterior Brick at Door ND
  - Sample 8-24-PCB15 2<sup>nd</sup> Course of Brick at Door ND
  - Sample 8-24-PCB17 2<sup>nd</sup> Course of Brick at Door ND
- 3. The granite at the front door impacted by caulk containing <50 ppm will be cleaned by manual methods. One wipe sample will be collected to confirm that the decontamination procedures reduced levels to less than  $10 \mu g/100 \text{ cm}^2$ .
  - Sample 10-7-PCB-10 Mortar/Granite at Front Door ND
  - Sample 10-7-PCB-11 Mortar/Granite at Front Door ND
  - Sample 10-7-PCB-12 Mortar/Granite at Front Door ND
  - Sample 8-24-PCB29 8" from Entry Door Frame ND
  - Sample 8-24-PCB30 8" from Entry Door Frame ND
- 4. At the interior door frame, the interior cinder block impacted by the caulk containing <50 ppm will be cleaned by manual methods and verification samples will be collected as indicated in Table 1.
  - Sample 8-24-PCB31 Interior Cinder Block at First Cut Line ND
  - Sample 8-24-PCB32 Interior Cinder Block at First Cut Line ND

# Removal Procedures

- 1. Source Removal
  - The PCB source materials that contain <50 ppm will be removed in a manner similar to ACM caulk remediation. The material will be disposed of as PCB Bulk Product Waste. The caulk at the interior windows and doors in the stairwells contain <50 ppm PCBs and will not require any substrate removal as part of the PCB caulk removal and will be confirmed through verification sampling. The window frames and doors frames will be disposed of as PCB Bulk Product Waste or decontaminated with Capsur solution.
  - The parapet caulk will be disposed of as a PCB Bulk Product Waste. The first full course of bricks will be removed and disposed of as a PCB Remediation Waste.
  - The exterior window caulk and exterior sill caulk both contain PCBs at amounts greater than 50 ppm. These materials will be removed along with the window



units as PCB Bulk Product Waste (caulk/sill) and PCB remediation waste (windows). The movable parts of the windows have glazing that is asbestoscontaining and PCB <50 PPM and will be disposed of as combination PCB remediation waste and non-friable asbestos. The window caulk will be disposed of as combination PCB bulk product waste and asbestos-containing material.

- The perimeter of the window units will be removed as follows: one length of brick (8") will be removed from around the window perimeter (2 sides) and this material will be disposed of as PCB Remediation Waste.
- The steel lintels will be stripped of caulk/cleaned using Capsur solution and recycled as metal scrap.
- The exterior PCB removal will occur after all interior abatement has been completed. Critical barriers will be installed at the interior of the window units to be removed. Any exterior door caulk requiring PCB removal will have critical barriers installed on the inside of the doorways.
- 3. A test removal will be performed to determine the most expedient and cost effective method for window and brick removal. Poly sheeting will be laid on the ground secured to the building façade and extending out equal to the height of the building. This will establish the work area and barrier tape will be installed at the perimeter of the work area. The sheeting will be secured with 2'x4' bracing to prevent any lifting. Any penetrations within the work area will be covered with 6 mil polyethylene sheeting and duct tape. Area sampling will be performed at the perimeter of the work area as well as monitoring of the personnel within the work area. Workers leaving the work area shall utilize a wash station where they will wash hands and face and remove their work clothes before exiting the work area. All tools and equipment leaving the work area shall be decontaminated.
- 4. The brick surrounding the window units, to the left and right, shall be demarcated with orange spray paint at 8" to indicate area of substrate to be removed as remediation waste.
- 5. Wherever feasible the window units will be removed using mechanical means and laid on the ground on top of the poly sheeting. They will be securely wrapped with poly within the work zone and lifted into 40 yard cans for disposal. All debris from the window removal process shall be properly bagged and disposed of as bulk product waste.
- 6. After the window unit removal workers will utilize lifts to ensure all caulk is gone and enough adjacent substrate has been removed as indicated by the presence of the spray paint markings. The masonry sills will also be removed as part of the PCB remediation. Workers will remove additional substrate as required to meet the requirement.

#### Verification Sampling

After removal of substrates, verification sampling will be conducted in accordance with the frequency identified in Table 1. Sampling will be conducted according to procedures within the EPA-Approved QAPP provided in Appendix D. Analysis will be performed by EPA Methods 3540C (soxhlet extraction) and 8082. Samples will be analyzed by TestAmerica Laboratories in accordance with the QAPP and the CTDEEP RCPs.

## Soil Excavation and Rationale

The plan for soil excavation, including the extent and depth is shown on Figure 3. The cleanup goal will be less than 1 ppm for total PCBs. Soil excavation will be conducted with a





flat blade bucket to minimize over excavation. Work will be conducted in a fashion to minimize dust and the area may be misted with water to control dust if necessary. Soil will be stored according to the procedures outlined below for later off-site disposal of as a PCB Remediation Waste at a non-TSCA (<50 ppm) facility.

The 5-foot sampling grid spacing has adequately characterized the site and provided sufficient information for excavation. The area identified on Figure 3 for excavation and disposal as a PCB Remediation Waste <50 ppm includes only the samples where PCBs were detected above 1 ppm. The limits of excavation will be extended to sampling points were PCBs were detected below 1 ppm as shown on Figure 3.

After excavation, cleanup verification soil samples will be collected on a 5 foot grid pattern in accordance with 761.61(a)(6) for analysis of PCBs by EPA Methods 3540C (soxhlet extraction) and 8082. Samples will be analyzed by TestAmerica Laboratories in accordance with the EPA-Approved QAPP and the CTDEEP RCPs.

Compositing of soil samples may be conducted in accordance with 761.289(b)(1) whereby a maximum of nine samples will be composited and the maximum area enclosing a nine grid point composite is two grid intervals bounded by three collinear grid points. Where the depth of excavation exceeds 1 foot, samples will be collected from the sidewalls on a 5-ft grid pattern. Duplicate samples will be collected at a frequency of 5%.

#### **Transformer Vault**

The transformer will be re-sold or disposed of according to 40 CRF 761 by Manafort Brothers. The concentrations of PCBs in the sediment on the floor are less than 1 ppm and no cleanup is required. The electrical pod and leaked oil did not contain any detectable concentrations of PCBs (detection limit 0.91 ppm) and will be disposed of as a solid waste in accordance with CTDEEP regulations by Manafort.

# **Oversight and Air Monitoring**

All work will be overseen by the project LEP, Jim Olsen who will advise the PRA, EPA and CTDEEP of the project progress. Manafort will be overseen in field by a Tighe & Bond or Eagle environmental scientist. Field notes will be taken on a daily basis and the photodocumentation of the project will also be conducted.

The field scientist will monitor dust control procedures implemented by Manafort. Additionally, Tighe & Bond will implement an air monitoring program to monitor dust levels. A DataRam PDR-1000 air monitoring instrument will be used to monitor conditions. Prior to demolition, the DataRAM will be used to monitor conditions over an 8-hour period to establish background conditions. During demolition, the DataRAM will be used to monitor air conditions over the 8-hour work day on a measuring frequency of 1 minute. The DataRAM will be set up within 10 feet outside of the work zone. Conditions will be deemed unacceptable and corrective measures will be taken if the mean air concentrations are 0.15 mg/m3 over background conditions.

# **Decontamination**

Decontamination procedures will be conducted in accordance with the double wash/rinse method in accordance with 40 CFR 761.79(c)(2)(ii) (subpart S) for Dirty and Oil Surfaces. The procedure for decontamination of Movable Equipment, Tools, and Sampling Equipment will be conducted as follows:





#### First Wash

Cover the entire surface with Simple Green. Contain and collect all cleaning solutions for proposal disposal. Rough surfaces will be scrubbed by brush or scrubbing pad while adding cleaning solution so as the surface is always wet and each square foot is washed for a minimum of one minute. Smooth surfaces will be wiped with a cleaning solution soaked disposable absorbent pad so that each one square foot is wiped for a minimum of one minute. The residual cleaning solution and suds will be mopped up/absorbed using clean, disposable, absorbent pads until the surface appears dry. This cleaning will remove any residual dirt, dust, grime or other absorbent materials left on the surface during the first wash.

## First Rinse

Rinse off the wash solution with one gallon of clean water per one square foot of surface and capture the rinse water. Mop up the wet surface with a clean, disposable, absorbent pad until the surface appears dry.

#### Second Wash

Cover the entire surface with a Terpene Hydrocarbon Solution, Chemsafe Orange so the PCBs are soluble to at least five percent by weight. Contain and collect all runoff solvent for proper disposal. Rough surfaces will be scrubbed by brush or disposable scrubbing pad and solvent while ensuring that each on square foot of area is always very wet for a minimum of one minute. Smooth surfaces will be wiped with a solvent soaked, disposable absorbent pad so that each area up to and including one square foot is wiped for a minimum of one minute. Wipe, mop, and/or absorb the solvent onto the absorbent material until no visible traces remain.

#### Second Rinse

Wet the surface with clean rinse solvent, ensuring that the entire surface is very wet for a minimum of one minute. Drain and contain the solvent from the surface. Wipe the residual solvent off the drained surface using a clean, disposable absorbent pad until no liquid is visible on the surface.

## **PCB Waste Storage and Transportation**

PCB Waste Storage and Transportation will be conducted according to the following procedures:

- A secure, lined, and covered container (roll-off or equivalent) or 55-gallon DOT approved steel containers will be staged for the collection of PCB wastes generated during the work activities at the above location in accordance with 40 CFR 761.65 and/or soils will be direct loaded in transportation vehicles for shipment to the disposal facility.
- 2. All PCB waste generated during the PCB remediation activities, including PPE, poly sheeting, and PCB-containing materials and contaminated debris will be disposed of as PCB remediation waste. The owner's representative must sign for the disposal of the waste material when picked up by the waste transporter. Appropriate copies of all waste manifests will be kept by the owner for record-keeping purposes and confirmation of proper disposal.
- 3. All containers will be properly labeled and marked in accordance with 40 CFR 761.40 and will be marked with the name of the waste contained; the date in which the first





- material was placed in the vessel; and the last date at which addition of waste occurred. All waste containers must be marked with a PCB ML mark.
- 4. If roll-off containers are to be utilized for accumulation of PCB debris, the following will apply:
  - i. All roll-off containers or other similar vessels utilized will be watertight and lined with 6-mil polyethylene sheeting or equivalent impermeable lining, and equipped with a secured and impermeable cover.
  - ii. The impermeable cover will remain securely in place at all times when material is not being actively placed in the vessels. The cover will remain securely intact until the container is removed from the site. No free liquids will be present in bulk loads.
  - iii. Roll-off containers are of 30 cubic yard configuration with sealed gates and will carry 25 cubic yards of debris or 17 tons of soil, 6'x22'x8'.
- 5. The waste containers will remain staged at the site with a secure impermeable cover in place until the materials are transported from the site to be delivered to the designated disposal facility.
- 6. If 55-Gallon barrels are to be utilized for waste containerization, the barrels will consist of suitable DOT-approved 55-gallon barrels that are watertight and free of corrosion, perforations, punctures, or other damage. All barrels will be securely covered and sealed at the conclusion of each work day. Accumulation and storage markings as above will apply.
- 7. If end dump trucks (dump trailers or tri-axle dump), are to be utilized for "live loading" of debris or soils, a 6-mil poly liner will be reinstalled prior to loading and a secure tarping system will be used at load completion. All PCB markings remain the same as above.
- 8. Properly containerized waste with PCB>50 ppm must be transported by a licensed hauler and shipped as TSCA regulated waste, PCB Bulk Product Waste or Bulk PCB Remediation waste for disposal at a permitted facility for PCB Waste>50 ppm. As follows:
  - i. In an incinerator approved under 40 CFR Part 761.70
  - ii. In a chemical waste landfill approved under 40 CFR Part 761.75
- 9. All driver responsibilities will be adhered to, including the OSHA 40 Hour Hazardous Waste Operations/Emergency Response Training, up to date medical cards, and PPE, hats, vests, gloves. All drivers are fully trained in correct Uniform Hazardous Waste Manifest execution.
- 10. Uniform Hazardous Waste manifests will be fully executed, with the exception of signatures and dates with the site superintendent. The generator or authorized generator representative will sign and date in generator section, driver will sign and date in driver section and copy #6 (Generators initial copy) will be torn off at the site and left with the generator. All other copies will travel with load to the disposal facility until facility acceptance. At that point all original copies will be distributed to appropriate state agencies and to the generator. A copy only of the signed manifest will accompany the invoice with certified scale weight tickets, to be sent the PRA.
- 11. Uniform Hazardous Waste Manifest will be used and all PCB wastes will be manifested (Section 12) in Kilograms as mandated by 40 CFR 761.180. These weights are estimated and will be verified by a certified scale ticket also attached to the final invoice sent to the PRA.



12. Section 14 Special Handling instructions and Additional Information should include items such as an ERG number, approval number, and PCB Out of service date.

# **PCB Waste Disposal**

PCB Bulk Product and Remediation Waste with PCB concentrations greater than or equal to 50 mg/Kg will be disposed of at a TSCA facility, either the Environmental Quality Company (EQ) Wayne Disposal Landfill in Belleville, Michigan or the Waste Management Disposal Landfill in Model City, New York.

Remediation Waste with PCB concentrations less than 50 ppm will be disposed of at a non-TSCA facility, the Waste Management Turnkey Landfill in Rochester, New Hampshire.

All non-liquid cleaning materials and personal protective equipment (PPE) will be containerized and disposed of at a facility approved to receive PCB contaminated materials.

All liquids from decontamination will be incinerated in accordance with Section 761.70.

CT regulated PCB waste will be disposed of at a licensed facility.

#### **Contractor Work Plan**

A contractor work plan for Manafort Brothers is provided in Appendix M.

# Reporting

A report will be prepared of the cleanup activities for submittal to EPA and CTDEEP following completion. The report will contain a narrative of cleanup activities, verification sampling results, photo-documentation, map of final excavation showing extent and depth, analytical data, summary of decontamination activities, and waste disposal manifests and records.

#### Certification

The Town of Preston is the owner of the property and the Preston Redevelopment Agency (PRA) is the party conducting the cleanup. The Town of Preston and the Preston Redevelopment Agency certify that all sampling plans, sample collection procedures, sample preparation procedures, extraction procedures, and instrumental/chemical analysis procedures used to assess or characterize the PCB contamination at the cleanup site are on file with the Town of Preston and the Preston Redevelopment Agency and are available for EPA inspection. A signed certification is provided in Appendix N.

The contact for the PRA is:

Frank Ennis

PRA Site Operations Director 389 Route 2 Preston, CT 06365 Riverwalk Field Office (203) 930-0375 fennis@prestonriverwalk.com





## **Schedule**

The following is the proposed schedule for the Ribicoff Building PCB Cleanup Project.

Task	Start Date	<b>Completion Date</b>
Bulk Product and Remediation Waste Removal	6/11/12	7/31/12
Soil Excavation	7/30/12	8/3/12
Verification Sampling	7/16/12	8/3/12
<b>Laboratory Analysis</b>	7/16/12	7/31/12
<b>Report Preparation</b>	7/30/12	8/30/12

It should be noted that additional time may be required if verification samples have PCB concentrations greater the 1 ppm and additional excavation is required.

If you have any questions or comments, please contact me at (860) 704-4761 or <a href="mailto:jtolsen@tighebond.com">jtolsen@tighebond.com</a>.

Very truly yours,

# **TIGHE & BOND, INC.**

James T. Olsen, LEP

Senior Project Manager, Associate

# **Enclosures**

Appendix A - Figures

Figure 1 – Site Location Map

Figure 2 – Aerial Photograph

Figure 3 - Sampling Locations and Excavation Plan

PCB-SO-1

PCB-SO-2

PCB-SU-1

PCB-SU-2

Appendix B – Tables

Table 1 - Summary of PCB Source and Substrate Data and Verification Sampling

Table 2 - Summary of Soil PCB Analytical Data

Appendix C - Photographs

Appendix D - Nobis Hazardous Material Survey

Appendix E - Quality Assurance Project Plan

Appendix F - Eagle Supplemental HBMI

Appendix G- Eagle PCB Containing Materials Sampling & Analysis

Appendix H - Eagle Supplemental PCB Containing Materials Sampling & Analysis

Appendix I - Parapet and Lintel Laboratory Data

Appendix J – Soil Laboratory Data



Appendix K – Transformer Laboratory Data Appendix L – Capsur MSDS

Appendix M – Contractor Work Plan

Appendix N – Certification

Copy: Gary Trombly - CTDEEP

Alan Petersen - EPA

Frank Ennis – Preston Redevelopment Authority

Michele Lester - Manafort Brothers Pete Folino – Eagle Environmental

